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Fact Sheet: Trauma Exposure Among American Indians and Alaska Natives

The ACE Study

Thanks to the landmark Adverse Childhood Experiences (ACE) Study conducted by the Centers for Disease Control and Kaiser Permanente (Felitti et al., 1998; Dube et al., 2001; CDC, 2021) and numerous successor studies, we know that children who experience trauma are at increased risk of a range of negative outcomes. The ACE Study involved assessing the number of exposures to any of 10 traumas or “adverse childhood experiences” in a group of 17,337 mostly middle-class adults who were members of California’s Kaiser Permanente health care system. The types of traumas included in the ACE survey questionnaire included emotional, physical, and sexual abuse, as well as five categories of household dysfunction. The study then examined the relationship between these childhood traumas and later-life problems.

The ACE Study found that over 60% of participants had experienced at least one ACE and that 12.5% had experienced 4 or more. The study also found that numerous problems were strongly linked to child trauma exposure, including alcoholism, drug use, smoking, depression, suicide attempts, risky sexual behaviors, teen pregnancy, poor academic and work performance, heart and pulmonary disease, and diabetes. The higher the number of trauma exposures, the more severe the adverse outcomes. For example, an individual reporting exposure to 4 ACEs is 12 times more likely to attempt suicide than someone with 0 ACEs, and exposure to 6 or more untreated ACEs correlates with a 20-year deficit in life expectancy.

ACEs/Trauma Among Native Populations

American Indians and Alaska Natives were not significantly represented in the original ACE Study. A number of studies in the years since have attempted to establish the prevalence of ACEs and/or traumatic experiences among individual Tribal populations, multi-Tribe samples, and, more recently, representative national samples of AI/ANs. These studies, despite wide conceptual and methodological variations, have consistently indicated that AI/AN populations experience trauma at higher rates than other U.S. population groups.

Studies With Nationally Representative AI/AN Samples:

1. A study published in 2021 (Giano et al.) provides the most representative survey of ACEs exposure among AI/AN populations nationally to date. Using [Behavioral Risk Factor](#)



[Surveillance System](#) data from 34 states from 2009 to 2017, the researchers disaggregated ACE data for 3,894 AI/AN individuals. They found that the average ACE score (number of childhood traumas experienced) for AI/AN participants was 2.32, approximately 40% higher than for individuals who identify as Black (1.66) or Hispanic (1.63) and over 50% higher than for individuals who identify as White (1.53).

2. A study published in 2016 (Kenney & Singh) used parent-reported ACE data for 1,453 AI/AN children from the 2011-2012 [National Survey of Children's Health](#) and compared these children's ACE scores with non-Hispanic White children's scores. The researchers found that AI/AN children were more likely to have experienced 2+ ACEs (40.3% versus 21%), 3+ ACEs (26.8% versus 11.5%), 4+ ACEs (16.8% versus 6.2%), and 5+ ACEs (9.9% versus 3.3%) compared to non-Hispanic White children.

Other Large/Multi-Tribe Studies of ACEs/Trauma Among AI/AN Populations

1. A study published in 2017 (Warne et al.) examined data collected as part of the South Dakota Health Survey (SDHS), administered across the state in 2013-2014. The SDHS included the ACE questionnaire as well as other questions about mental health conditions, alcohol and tobacco use, and participant demographics. The researchers compared responses from 516 AI/AN adults from urban and reservation communities to responses from 7078 non-AI/AN adults. Their findings related to ACEs prevalence were as follows:

Number of ACEs	AI/AN participants	Non-AI/AN participants
0	16.84%	50.02%
1	21.59%	23.02%
2	16.2%	9.6%
3	12.99%	6.09%
4-5	13.1%	7.38%
6+	19.28%	3.89%

2. A study funded by the National Institute of Justice (Rosay, 2016) used nationally representative data for 2,403 AI/AN women and 1,505 men from the [National Intimate Partner and Sexual Violence Survey](#). The study found that AI/AN women were significantly more likely to experience violent victimization than non-Hispanic white women, both over their lifetimes and in the past year:

Violence Against Women				
Type of violence	Lifetime exposure		Past-year exposure	
	AI/AN	Non-Hispanic White	AI/AN	Non-Hispanic White
Any	84.3%	71%	39.8%	23.3%
Sexual	56.1%	49.7%	14.4%	5.4%



Physical – intimate partner	55.5%	34.5%	8.6%	4.1%
Stalking	48.8%	26.8%	11.6%	7%
Psychological aggression – intimate partner	66.4%	52%	25.5%	16.1%

3. Manson et al. (2005) studied lifetime trauma prevalence among 3,084 tribal members aged 15-57, including one southwest tribe and two Northern Plains tribes using data gathered in 1997-1998 as part of a larger epidemiological project. They found that 66.2%-69.8% of tribal women and 62.4%-67.2% of tribal men in their sample had experienced at least one of 16 forms of trauma. The rates of lifetime trauma exposure among a comparison group of U.S. men and women were 60.7% for men and 51.4% for women.

4. In a study of the relationship between ACEs and alcohol dependence among 1,660 AI/AN adults across seven geographically diverse tribes, Koss et al. (2003) found that 86% of participants reported one or more ACEs and 33% reported four or more.

Other Studies

Study	Population sample	Trauma category	Trauma exposures	
			1+	Multiple/severe
Brockie et al. (2015)	288 tribal youth aged 15-24 from one Northern Plains reservation	Childhood (ACEs)	78%	<ul style="list-style-type: none"> 40% (2+) 37% (3-6)
Ehlers, Gizer, Gilder, & Yehuda (2013)	309 AI adults from 8 geographically contiguous reservations	Lifetime	94%	Not reported
De Ravello, Abeita, & Brown (2008)	36 incarcerated AI/AN women in New Mexico	Childhood (ACEs)	97.2% (35 of 36)	<ul style="list-style-type: none"> 81% (2+) 53% reported childhood sexual abuse
Robin et al. (1997)	247 adult members of one Southwest tribe	Lifetime	81.4%	<ul style="list-style-type: none"> 66% (2+) Median # of exposures: 6.47



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